

WHAT IS CLAIMED IS:

1. A hydrogen-storage material comprising a plurality of carbon carriers made of a carbon material having an electric conductivity, and a plurality of fine particles carried on each of said carbon carriers and having a hydrogen-adsorbing ability,

wherein the amount A of said fine particles carried is in a range of 0.1 % by weight  $\leq A \leq 20$  % by weight,

wherein said fine particles is at least one selected from fine particles of a metal, fine particles of an alloy and fine particles of an oxide semiconductor,

wherein said metal is at least one selected from the group consisting of V, Nb, Ta, Ti, Zr, Hf, La and Ce,

wherein said alloy is an alloy made of at least one selected from the group consisting of Mg, Ti, a rare earth element, Zr, V, Ca and Al and at least one selected from the group consisting of Fe, Co, Ni, Cu, Mn, Mo and W, and

wherein said oxide semiconductor is at least one selected from the group consisting of an Ni oxide semiconductor, a Cr-oxide semiconductor, a Cu-oxide semiconductor, an Mn-oxide semiconductor, an Sn-oxide semiconductor, a Zn-oxide semiconductor, a V-oxide semiconductor, a Ti-oxide semiconductor, a Co-oxide semiconductor and an Fe-oxide semiconductor.

10079815-02200

2. A hydrogen-storage material according to claim 1, wherein the average particle size  $d$  of said fine particles is equal to or smaller than  $1\text{ }\mu\text{m}$ .

3. A hydrogen-storage material according to claim 1 or 2, wherein said carbon carrier is at least one selected from the group consisting of activated carbon, carbon black, a nano-tube and fullerene.

100946-0000